Electronic lockstitch pattern tacker with treble hook

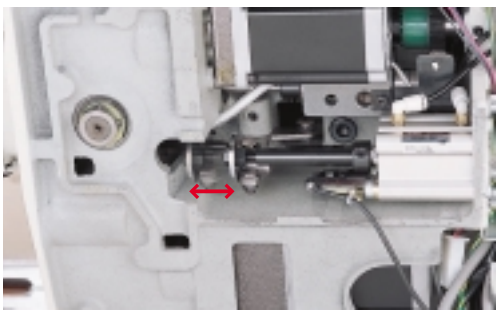
KE-484C

- Knife method cuts even extra thick threads accurately.
- Pneumatic drive wipes the thread smoothly.
- Stable thread tension release improves sewing performance.
- Stitch patterns can be changed easily.

This electronic pattern tacker is ideal for sewing heavy and extra-heavy materials such as seatbelts. It gives excellent economy, with shorter cycle times and easier maintenance.

Attractive and accurate sewing finishes for extra-heavy materials

A variety of thread types up to #0 can be cut accurately.



- A knife method is used for thread trimming. When the knives are meshing, the movable knife and fixed knife are driven by a pneumatic cylinder. Extra thick threads of up to #0 can be cut accurately regardless of the material of the thread.
- The speed of the knife is controlled by a pneumatic cylinder which reduces excessive spinning of the bobbin during thread trimming. The thread is held securely from the start of sewing so that stable seams are created.
- Unlike the heat cutting method, the knife method does not require a heater to be warmed up, so it reduces cycle time. It also saves electricity costs and makes temperature control unnecessary. In addition, the knives are much more durable than the heater wires, so that the knives can accurately cut a greater variety of threads. They are also easier to maintain.
- The thread wiper is also driven by a pneumatic cylinder. The upper thread can be wiped accurately even under conditions where the thread is difficult to pull out of the material.

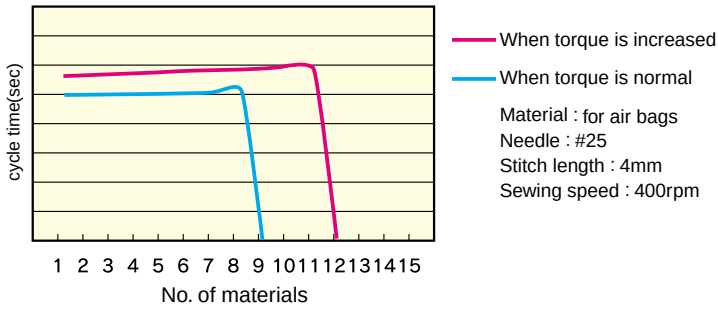
Optimized thread tightening creates attractive sewing finishes.

A pneumatically-driven thread tension release mechanism has been adopted. Compared to cam-type methods, this mechanism provides much stronger thread tension. In addition, the thread tension discs open and close accurately even when high tensions are applied to the upper thread, so that the upper thread trailing length is kept at a constant length and problems at the sewing start are prevented. Stable and accurate thread tightening is provided even under high load conditions, so that good thread tightening can be obtained even when sewing through several layers of material, thereby increasing the range of sewing applications. Plus, a new thread take-up mechanism ensures that the thread tightening is optimum for the material being sewn.

Attractive and accurate sewing finishes for extra-heavy materials

Increased material penetration force

The adoption of an inside motor allows the operator to easily increase the torque to the optimum level for the article being sewn simply by replacing the pulley and PROM. (Available by special order)


cycle time(sec)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
No. of materials
When torque is increased
When torque is normal
Material : for air bags
Needle : #25
Stitch length : 4mm
Sewing speed : 400rpm

Thread pulling-out is prevented at the sewing start

A pneumatic-type thread take-up device is equipped as standard. This device allows you to easily set the thread feeding length at the sewing start to the optimum length (0 to 20 mm) for the material. Allowance can also be made for the thread trailing length to prevent the thread from pulling out at the sewing start.

No thread staining

The oil supplied to the rotary hook is kept clean at all times, which helps to prevent staining of the thread.

Superb ease of operation greatly increases working efficiency

Simple pattern changing

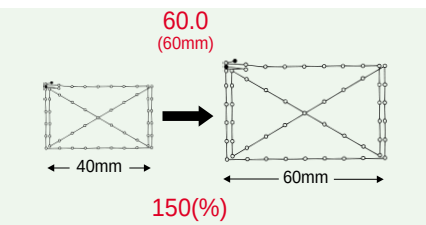
Because this is an electronic pattern tacker, the sewing patterns can be easily changed just by using the operation panel. Changes to line organization can also be made easily.

Abundant data storage capacity

Max. No. of stitches is 20,000. Up to a maximum of 16 user programs can be created, each with its own sewing pattern, enlargement ratio and sewing speed.

Pattern enlargement and reduction is also easy

Enlargement and reduction of the sewing patterns can be set at a touch using the operating panel. The ratios can be entered either as a percentage or in length (mm). (determined by DIP switch setting)



Cycle sewing

Up to 4 cycle sewing patterns can be programmed. Max. 15 patterns/cycle can be programmed.

Presser foot lift amount

The presser foot lift amount is a maximum 25 mm. Even extra thick materials can be inserted and removed with space to spare. In addition, the presser foot lift amount can be set to different heights to match the working requirements.

Smooth pedal operation

The foot switch needs only a light pedal pressure to operate. This reduces the operator's working fatigue and gives better work efficiency.

Easy-to-use independent operating panel

The operator can select whichever position is easiest to use.

Abore the work table

Below the work table

Accurate home position detection

The home position sensor incorporates a non-optical proximity sensor, so the sensor is not subject to operating errors from oil or dust, and cleaning oil and dust from the sensor are also unnecessary.

Reduced bobbin replacement frequency

The triple capacity rotary hook allows 3 times the lower thread to be wound on compared to standard bobbin. This reduces the frequency of bobbin changes and also reduces overall cycle time.

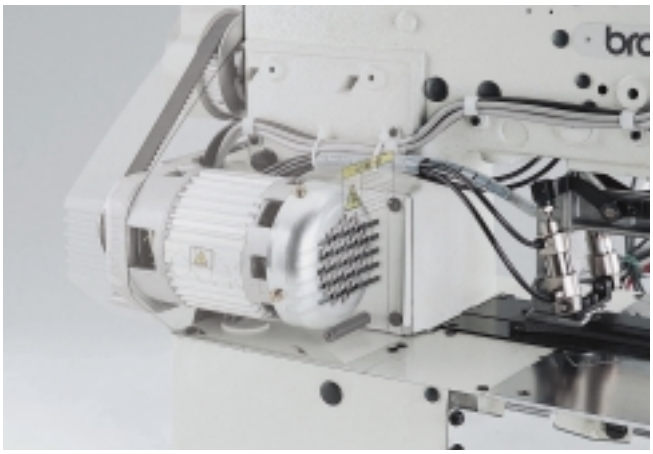
Excellent durability

Bearing brackets have been adopted as the needle bar and thread take-up shaft brackets. These bearings ensure stable and accurate performance with excellent durability, so that stable sewing is possible using threads of up to #0 in thickness. They improve reliability when sewing under heavy loads, and increase the range of sewing possibilities.

Built-in Motor system

Improved productivity

An built-in motor system that is ideally suited to cycle sewing machines has been adopted. This system reduces overall cycle time.



Low noise and low vibration

Integration of the motor and the machine head and the adoption of a timing belt make sewing machine operation much quieter and reduce machine vibration.

Easier maintenance

Periodic adjustment of the belt tension and adjustment of the motor position are no longer necessary. The machine head can also be tilted back to carry out adjustments without the need to remove the belt cover.

No contamination of the material

The adoption of a timing belt eliminates the problem of belt shavings soiling sewing products.

Options

Thread breakage detector

The automatic stop is activated and a buzzer sounds to warn the operator when a thread breakage is detected.

Home position standard plate

Peripheral equipment

PS-3000
Programming software for electronic pattern sewer

This is a software program which creates new sewing patterns using a personal computer.

Specifications

KE-484C-X

At the time of shipment, the P-ROM will be blank and the presser foot and feed plate will be unmodified. (The presser foot, needle plate and PROM specifications can be specified in detail to suit your requirements when ordering.)

Model	Lock stitch	Triple hook	Heavy materials	Extra heavy materials	Sewing area	Stitch length	Thread trimmer	Thread wiper	Max. sewing speed	Air consumption
KE-484C	★	★	★	★	100×60mm	0.1-10.0mm	★	★	2,200 rpm	0.5MPa 26 ℓ/min

★ When stitch length is 3mm or less.

Feed mechanism	R-θ intermittent feed mechanism (pulse-motor driven mechanism)
Needle	DP X 17 #25
No. of stitches	Variable
Max. stitch number	20,000 stitches (including 10,000 stitches which can be added)
Work clamp lifter	Pneumatic type
Work clamp height	25 mm max.
Thread take-up device	Standard equipment
Data storage method	P-ROM (Any sewing pattern can be added using PS-3000.)
No. of user programs	16
No. of cycle programs	4
No. of stored data	Up to 100 patterns can be added. Total number of stitches of stored data which can be added is within 10,000.
Enlarging and reducing patterns	20 - 200%
Motor	Three-phase 400 W induction motor
Weights	122.6 kgf (100V, 110V), 117.6 kgf (240V, 380V, 400V), 112.6 kgf (220V, 230V) Machine head: 56 kgf, Operation panel: 0.6 kgf, Control box: 19 kgf (100V, 110V) 14 kgf (240V, 380V, 400V), 9 kgf (220V, 230V)
Power source	Single-phase 100V, 110V, 220-230V, 240V, 3-phase 200V, 220V, 380V, 400V
Safety deviice	Max. electric power consumption 600VA Intermediate stop function

Product specifications are subject to change for improvement without notice. Please read instruction manual before using the machine for safety operation.

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